

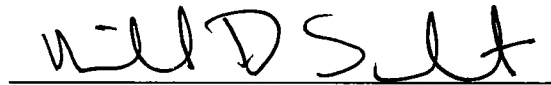
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PTO/SB/33 (01-09)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
		2875.0490001	
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	09/703,264	October 31, 2000	
	First Named Inventor		
	Art Unit	Examiner	
	2614	Jamal, Alexander	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number 54,463</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			
<p><input checked="" type="checkbox"/> *Total of 1 forms are submitted.</p>			



Signature

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August 12, 2009

Date

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

THI *et al.*

Appl. No.: 09/703,264

Filed: October 31, 2000

For: **Method and System for Stereo Echo
Cancellation for VOIP Communication
Systems**

Confirmation No.: 9016

Art Unit: 2614

Examiner: Jamal, Alexander

Atty. Docket: 2875.0490001

Arguments to Accompany the Pre-Appeal Brief Request for Review

Mail Stop: AF

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants hereby submit the following Arguments, in five (5) or less total pages, as an attachment to the Pre-Appeal Brief Request for Review Form (PTO/SB/33). A Notice of Appeal is concurrently filed.

Arguments

Applicants' arguments in the Reply under 37 C.F.R. § 1.111 filed March 17, 2009 ("*Reply*") and the Reply under 37 C.F.R. § 1.116 filed July 15, 2009 ("*After Final Reply*"), filed in response, respectively, to the Office Action mailed December 17, 2008 ("*Office Action*") and the Final Office Action mailed April 16, 2009 ("*Final Office Action*"), were not properly considered by the Examiner in the *Final Office Action* and the Advisory Action issued July 27, 2009 ("*Advisory Action*"). The Final Office Action was legally and factually deficient because it misapplied the law, and relied on factual findings that were either erroneous or irrelevant. Moreover, the Office has not met its initial burden as set forth in M.P.E.P. § 2164.04, based on these evolving factual findings.

The *Final Office Action* rejected claims 1-39 under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the enablement requirement. Applicants respectfully traverse this rejection.

1. *The Office Asserts an Evolving Set of Factual Findings That are Either Erroneous or Irrelevant*

The Office has asserted an evolving set of factual findings (denoted herein as **FFA** through **FFJ**) in support of its enablement rejections in the *Office Action*, the *Final Office Action* and the *Advisory Action*. In each case, Applicants have addressed these factual findings and found them to be either erroneous or irrelevant, as summarized below.

A. Office Action Dated December 17, 2008

In the *Office Action*, the Office asserted a single factual finding (denoted herein as **FFA**), namely that the "applicant has claimed a system with both a hybrid and speaker microphone coupled to the same driving point (as shown in applicant's figure 7)." The Office contended "that this is not an obvious or well known configuration and examiner contends one skilled in the art would not know how to implement such an interface based on applicant's disclosure." **FFA** is erroneous, and in response, Applicants noted that the "Hybrid H" in FIG. 7 is not the "Hybrid" that is labeled with Ref. Des. 166, as shown in FIG. 5. Moreover, the summation point in FIG. 7 is not shown with a Ref. Des. number, thereby reinforcing the fact that the simplified schematic of FIG. 7 depicts an abstraction that highlights the three unwanted signals of interest and the cancellation scheme. Although **FFA** was re-asserted in the *Final Office Action*, the Office has provided no response to the Applicants' reply in either the *Final Office Action* or the *Advisory Action*. Accordingly, Applicants assert that **FFA** has been addressed and no longer forms a basis for the enablement rejection.

B. Final Office Action Dated April 16, 2009

In the *Final Office Action*, the Office asserted nine new factual findings (denoted herein as **FFB** through **FFJ**) as the basis for the enablement rejection. These nine new findings are summarized below, together with a summary of the response provided in the *After Final Reply*. **FFB** ("Electrical Echo") challenged the source of the electrical echo. This finding is erroneous, and was addressed by citing page 5 of the specification. **FFC** ("Same Signal V(n)") noted that the same signal V(N) was input to both Hybrid H and speaker 329, and concluded that there "is no well known configuration where this occurs," that "the drawing is not accurate, and there is not an accurate description of exactly where the acoustic and electrical echo come from." **FFC**'s conclusions are erroneous, and Applicants responded by noting that the conclusion appeared to be based on a misconception that Hybrid H is a

physical component instead of a model of the imperfections of hybrid 166. Applicants further noted that FIG. 8 reinforces the validity of FIG. 7 by showing **V(n) as the source of both the electrical and acoustic echo**. In **FFD** ("Source Differentiation"), the Office contended that "it is not clear how applicant's claimed adaptive filter would differentiate between the two sources of echo by using the same reference input signal 300." This finding is irrelevant as echo differentiation is not being claimed, and therefore no enablement issue can arise. In **FFE** ("Algorithm Taking Account of All Processing Circuitry"), the Office asserted that "applicant's specification does not disclose an algorithm that is able to take into account all of the processing circuitry from the output of Hybrid through the acoustic feedback path." **FFE** is erroneous, and Applicants responded by noting that the algorithm applies to all design choices made within the architectural concept, that different choices of resistors, capacitors, inductors, integrated circuits, etc. are permissible within the architectural concept, that every single resistor, capacitor, integrated circuit does not need to be disclosed to one of ordinary skill in the art for enablement purposes, and that such choices are accommodated by the algorithm through changes in the transfer functions 400, 402 and 404, as illustrated in FIG. 8. In **FFF** ("Electrical and Acoustic Echo Differentiation"), the Office raised the issue of "[h]ow will the adaptive algorithm differentiate which is electrical echo and which is acoustic echo?" **FFF** is irrelevant, since echo differentiation is not claimed, and therefore no enablement issue can arise. In **FFG** ("Adaptive Algorithm Issue"), the Office raised the question of "[h]ow will the adaptive algorithm take into account the hybrid, the electrical echo, the communications medium, the telephone interface and the acoustic echo path when trying to adapt to the acoustic echo?" **FFG** is also irrelevant, since only the cumulative effects are claimed, and therefore no enablement issue can arise with respect to individual contributions to the unwanted signals. In **FFH** ("Combiner"), the Office raised the question of enablement with respect to the combiner. **FFH** is clearly erroneous, and Applicants referred the Office to FIG. 7 (301) and page 14 of the Specification. In **FFI** ("Music Generation Block Derived Unwanted Signal"), the Office noted that the music generation block is "seen as an interference source to the echo canceller." The relevancy of **FFI** was unclear, but in response, Applicants referred to FIGs. 7 and 8 that illustrate the forwarding of M(n) to combiner 301 for modeling the unwanted signal by adaptive filter 200. Finally, in **FFJ** ("Adaptive Algorithm"), the Office asserted that there is no disclosure of "an adaptive algorithm that will perform the claimed functions in the disclosed configuration."

FFJ is erroneous, and Applicants responded by referring to a cited passage from page 19 of the Specification. In summary, the Office appears to have acquiesced to the original factual finding (**FFA**), yet introduced nine (9) new factual findings in support of the enablement rejection. Applicants contend that six of these new findings are erroneous (**FFB**, **FFC**, **FFE**, **FFH**, **FFI**, **FFJ**) and the remaining three are irrelevant since signal differentiation is not claimed (**FFD**, **FFF**, **FFG**).

C. Advisory Action Dated July 27, 2009

Finally, in the *Advisory Action*, the Office appears to have acquiesced in all but four factual findings (**FFC**, **FFD**, **FFF**, **FFG**). These four factual findings continue to be asserted, to which Applicants respond as follows.

The Office has maintained **FFC**, by noting that "the signal VN (signal 327) is **not the same signal** going into both the acoustic echo path and electrical echo path. Applicant's drawing is misleading and is not possible. ... **Each hybrid** will not receive the same signal VN as shown in applicant's figure 7." As before, Applicants re-assert that such a finding is erroneous, and as FIGs. 7 and 8 readily illustrate, V(n) is the source of both the electrical and acoustic echo. Applicants further note that the Office's new explanation includes the wording "**Each hybrid**," which suggests multiple hybrids. Such a suggestion of multiple hybrids is completely erroneous, as one hybrid (and not multiple hybrids) is used and illustrated in FIGs. 5 and 7. Thus, a factual finding based on an assumption of multiple hybrids is without any foundation in the specification, as FIGs. 5 and 7 in the specification readily illustrate.

The Office has maintained **FFD**, **FFF** and **FFG**. As before, Applicants maintain that such findings are either irrelevant (combined effect is being modeled and not differentiated individual effects) or erroneous (algorithms have been provided in the specification). As above, Applicants have taken note of the Office's new explanation that now states that "applicant's specification does not disclose any algorithm that can model both the electrical echo at a hybrid, and model the echo of the signal going through the hybrid, across a communications medium, through the **interface of another device**, out of a speaker, picked up as acoustical echo, and transmitted back through the interface, communications medium, hybrid." It is not clear what feature shown in the specification or figures (e.g., FIG. 7) is being interpreted by the Office to be "the interface of another device." As FIG. 7 readily illustrates, the architecture shown is located at the **near end device**, and it is not clear what is

being referred to as the "another device." Thus, a factual finding based on an assumption of another device is without any foundation in the specification.

2. Conclusion

As the M.P.E.P. states:

In order to make a rejection, the examiner has the **initial burden** to establish a reasonable basis to question the enablement provided for the claimed invention. ... As stated by the court, "it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise, there would be no need for the applicant to go to the trouble and expense of supporting his **presumptively accurate disclosure.**" *M.P.E.P. § 2164.04 (emphasis added).*

In summary, the Office has not provided the required acceptable evidence or reasoning. Instead, it has asserted a number of factual findings, which are either irrelevant (combined effect is being modeled and not differentiated individual signal effects), or are clearly erroneous (Office's assertions are directly contradicted by the specification and drawings). Indeed, the Office's latest explanations now include "each hybrid" and "another device," which are neither explained nor form part of the instant specification.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the enablement rejection under 35 U.S.C. § 112, first paragraph.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



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Date: May 12, 2009

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